Puget Sound Stormwater Work Group

What We've Accomplished Since November and an Overview of our Recommendations

May 19, 2010 Jim Simmonds

What Am I Talking About?

- Who is the Puget Sound Stormwater Work Group?
- Why do we exist?
- > What have we done so far?
- How best to read our report
- What are we recommending?
- Next Steps



Part of Ecosystem Monitoring Program

- Part of Puget Sound Partnership's effort to coordinate ecosystem monitoring
- One of 3-5 initial topical work groups
- Each work group focuses on one aspect of ecosystem monitoring
- All work groups to be coordinated by the ecosystem monitoring program

How We Are Organized

- A caucus-based committee with broad representation
 - Federal agencies, state agencies, local jurisdictions, environmental groups, business, agriculture, ports, tribes
- Funded and staffed by Department of Ecology

What We Are Doing

- By June, 2010 recommend a regional coordinated stormwater monitoring and assessment strategy including:
 - A scientific framework for monitoring stormwater impacts and management effectiveness (volume 1)
 - An implementation plan recommending roles and responsibilities, including municipal NPDES stormwater permit requirements (volume 2)

Stormwater Work Group Schedule

2008 - 2010 Work Plan

2008 Oct 2009

May June - Oct

Nov

2010 Dec - April

May

June

Work Group Convenes First Regional Workshop: Early Ideas Work Group Develops Draft Scientific Framework Second Regional Workshop: Scientific Framework and Implementation Work Group
Revises
Scientific
Framework and
Develops Draft
Implementation
Plan

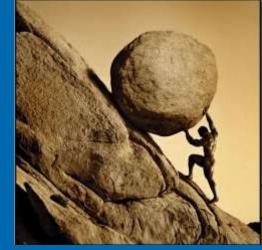
Third
Regional
Workshop:
Implementation Plan

Final
Strategy
Delivered to
Puget Sound
Partnership
and
Department
of Ecology



What Have We Done in the Last Six Months?

- Released draft scientific framework: Nov 4, 2009
- > Public workshop: Nov 10, 2009
- Received over 800 comments and five formal peer reviews on draft report
- Reviewed comments and incorporated into scientific framework
- Developed draft implementation plan
- > Released new document April 30, 2010



REVISED DRAFT

Stormwater Monitoring and Assessment Strategy for the Puget Sound Region, Volume 1: Scientific Framework Volume 2: Implementation Plan

Created and overseen by:

The Puget Sound Stormwater Work Group

(members listed on the following page)

With contributions from:

Derek Booth, Stillwater Sciences Chad Brown, WA Dept. of Ecology Scott Collyard, WA Dept. of Ecology Ken Dzinbal, WA Recreation and Conservation Office George Fowler, Independent Consultant Dennis Helsel, Practical Stats Joan Lee, Parametrix Consultants John Lenth, Herrera Environmental Consultants Julie Lowe, WA Dept. of Ecology Joy Michaud, Herrera Environmental Consultants Mike Milne, Brown and Caldwell Dale Norton, WA Dept. of Ecology Stephen Ralph, Stillwater Sciences Gary Turney, U.S. Geological Survey, retired Phyllis Varner, City of Bellevue Jim West, WA Dept. of Fish and Wildlife

April 30, 2010

How to Read Our Report

- Key Recommendations:
 voted on and approved by entire
 Stormwater Work Group
- Main Document: prepared by subgroups
 - Volume 1 = Scientific Framework
 - Volume 2 = Implementation Plan
- Appendices: additional detail and examples



1. Conceptualize

- Define initial team
- Define scope, vision, targets
- Identify critical threats
- Complete situation analysis

5. Capture and Share Learning

- · Document learning
- Share learning
- · Create learning environment

Conservation Measures Partnership Open Standards

2. Plan Actions and Monitoring

- Develop goals, strategies, assumptions, and objectives
- · Develop monitoring plan
- Develop operational plan

4. Analyze, Use, Adapt

- Prepare data for analysis
- Analyze results
- Adapt strategic plan

3. Implement Actions and Monitoring

- Develop work plan and timeline
- Develop and refine budget
- Implement plans

The Adaptive Management Cycle (Open Standards Conservation 2007)

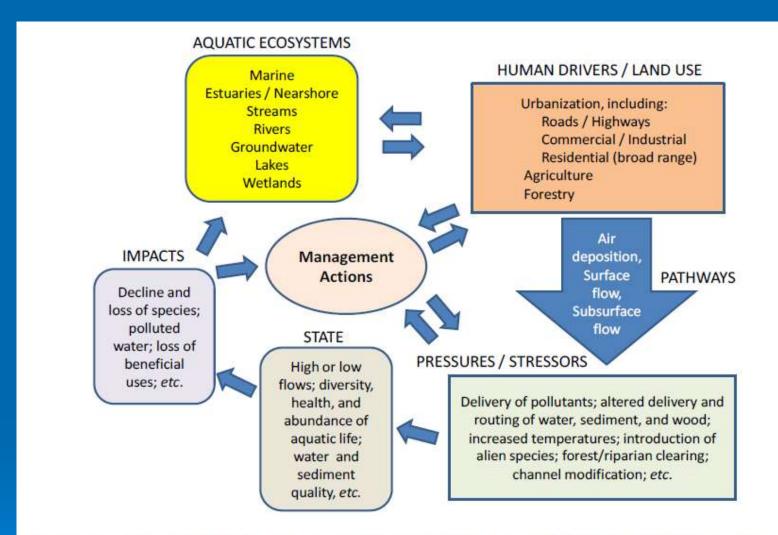


Figure 2. Conceptual Driver-Pressure-State-Impact-Response (DPSIR) model showing the complex interactions of land use and management actions on stressors impacting biological endpoints and beneficial uses in receiving waters and aquatic ecosystems.

Old Stormwater **Monitoring Paradigm**

- > Outfall compliance monitoring
- No linkage to beneficial uses
- > No way to prioritize based on impairment
- Every entity works independently
- > Very Expensive!!!





New Stormwater Monitoring Paradigm



- Monitor beneficial uses
- > Prioritize impairments to address first
- Detailed monitoring to find sources and drive management actions such as inspections and enforcements
- Test to make sure that we are doing is working, or if not, to find out why not
- Every entity works cooperatively

Key Recommendations

- Implementation Approach
 - Pay-in option in permit with new entity to manage collective funds for priority monitoring
- Status & Trends Monitoring
 - Small streams and marine nearshore monitoring
- Source Identification & Diagnostic Monitoring
 - WRIA-based prioritization and monitoring with link to actions
- Effectiveness Studies
 - Solicit and fund studies on priority topics

Cost Concerns

- How to fairly allocate costs
 - Feds, state, local, business, other
 - Between municipal permittees
- Affordability for Phase 2 permittees given economic conditions
- Phase 1 monitoring includes outfallbased monitoring – is expensive
- Ensuring accountability for pay-in option
- Ensuring sustainability of other funds



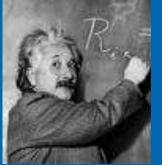
Some Issues to Ponder

- Other permittees not yet addressed
- > Public and political support
- > Link between policy and science
- > Overcoming fear of data due to possible future liabilities
- Maintaining and expanding cooperation
- Pollution Control Hearing Board has ruled that Ecology can require monitoring
- Ecology has stated that Phase 2 jurisdictions will have monitoring in the next permit

Work Group's Next Steps

- Final recommendation report by June 30
- Keep working
 - Coordinate with others
 - Set up new administrative entity
 - Refine cost and cost sharing issues
 - Refine study designs & work processes
 - Expand to be more inclusive

We Want Your



Input!

- > TODAY provide comments at workshop
- > Written comments due May 28
- Use on-line form if possible
- Comments in following categories
 - Key Recommendations
 - Regional Program Components
 - Status and Trends Monitoring
 - Source Identification Diagnostic Monitoring
 - Effectiveness Studies

